the stricture, the edge then turned up, and the division made by a slightly undulating motion directly upwards—knife parallel to the linea alba.

The stricture was remarkably firm and tendinous, and was distinctly heard when divided by the knife. The sac contained a small quantity of limpid serum. A small portion of the bowel was of a deep purple hue, interspersed with spots, and a knuckle of an ash hue which gave rise to some uneasiness. The bowel being returned into the abdomen brought to view the fugitive testicle lying immediately under the sac. It was much smaller in size than the other testicle, but perfectly healthy in colour, and firmly adhered to its strange locality. I did not attempt to remove it. The wound was dressed in the usual way, and the patient recovered without much trouble.

Dr. Taylor and Dr. Cartwell are entitled to much credit for their faithful attention after the operation.

ART. VIII.—Case of Internal Necrosis after severe Injury of the Thigh, with extensive Chronic Sub-periosteal Abscess; Operation; Cure. By H. O. HITCHCOCK, M. D., of Kalamazoo, Michigan.

Mr. P. V. W., aged 37 years, an architect and builder, presented himself at my office Nov. 15th, 1859, for examination and advice relative to his right thigh. He gave the following history: Five or six years ago, while raising the roof of a church in Hudson, N. Y., he received a severe raking injury in the right thigh, by the falling of heavy timbers upon its outer aspect. At the same time there was fracture and dislocation of the left ankle. A surgeon, soon in attendance, adjusted the fracture and dislocation, and "smoothed out" the muscles of the right thigh, which seemed torn from their origin and gathered in a heap under the skin. The injury was then considered only muscular.

A few weeks after the accident the patient began to suffer very severe pain in the right thigh, as if in the bone. This, he says, was considered and treated as a rheumatic pain for three weeks, when, choosing to die rather than be in such agony longer, the patient insisted that the attending physician should lance it. Two small openings were made on the posterior border of the biceps muscle, about midway of the length of the femur. These gave exit to a large quantity of sanious, watery pus, and afforded instant relief to the patient. These openings have never been closed, but continued, till the day I saw him, to discharge pus of the same description.

Six months after the accident, the patient was able to resume his employment, which he has since continued, though with much pain and great

discomfort. While in the upright position, at first, but little oozing took place, but the lower half of the thigh would soon become swollen and painful "as if," in his own expressive words, a "dog were gnawing it." And when the abscess was nearly filled, every contraction of the muscles of the thigh caused the matter to flow from the sinuses. In hot days in the summer, this discharge was often immense, and at night he would close the labours of the day by evacuating the pus from the lower part of his thigh with the foot elevated.

Such had been his life for the past five years. He had lost much flesh and much of his spirit and energy. He was warned just before he came to my office, by a painful swelling of the inner condyle, that the disease was about to invade the knee-joint. Hence his application for advice.

The patient is a large well-developed man, with no taint of scrofula or syphilis, of a pale sallow complexion, with an anxious expression of countenance indicative of long-continued suffering. The sinuses were empty, and the probe followed them easily to denuded bone. But so straight and narrow were the sinuses, it was impossible to determine whether the instrument impinged upon a sequestrum or not. An exploratory operation was advised, to which he readily submitted, it being agreed, however, that any operative procedure necessary for cure should at once be completed.

On making an incision of ten inches in length between the biceps and vastus externus muscles, commencing one and a half inches above the kneejoint, the bone was found bare of its periosteum throughout almost the entire length of the wound, and more than one-half the circumference of the bone.

What might have been the periosteum, was thickened, jelly-form, and seemed covered with a smooth, shining membrane. The surface of the bone was granular and somewhat crumbly. This surface was chiselled off to the depth of one-eighth to one-fourth of an inch, until healthy tissue was reached. The gelatinous covering above was also removed as far as possible.

In the upper half of the middle third the femur seemed decidedly and somewhat abruptly enlarged, even to nearly twice its natural size. On searching with care, there was found a hole about one-fourth of an inch in diameter, leading directly into the centre of the bone. This also was filled with the same jelly-form substance as was noticed to cover the bone. The bone was at this point trephined, and the medullary cavity scraped as the surface had been. And I was gratified in withdrawing from the centre of the bone a sequestrum one inch long, one-third of an inch wide, by one-sixth of an inch thick. The clearing process was carried on till nothing but healthy tissue could be brought from the medullary cavity.

It should be remarked that the thickness of the bone at the point of trephining was fully three-fourths of an inch, and very compact and hard. The wound was now well cleansed, and closed with a pledget of lint throughout its whole extent, to insure granulation from the bottom.

The patient was attacked in his weakness, by that most lupine of all diseases, ague. The progress of healing was very slow, and about six weeks after the operation the internal condyle became swollen and painful. This was laid freely open, and we found, on the inside of the thigh, a very extensive abscess with the same jelly-form lining, communicating at its upper part, over or anterior to the bone, and at its lower part, under or posterior to the bone with the exterior abscess. Astringent injections of zinci sulphatis gr. v, ad 3, and hydrarg bichlorid. gr. i, ad 3, were used with the most gratifying effect, so that on the first of April the disease seemed wholly eradicated, and the wound almost entirely closed; and our patient entered upon a very large contract of heavy buildings, in better health and spirits, and more fleshy than he had been for five years. To-day, two months later, the wound is completely healed, and the leg seems perfectly sound.

This case presented to me some points of interest:-

- 1st. Was there not a fracture of the femur at the time of the accident, and hence the internal necrosis?
- 2d. Would not free incisions through the periosteum, at the time of the supposed rheumatic pain, have saved the patient from all the trouble of the sub-periosteal abscess?
- 3d. The value of a solution of bichloride of mercury as an injection in old sinuses and chronic abscesses.
  - 4th. The fact that no periosteum will be formed to a large extent.

KALAMAZOO, MICHIGAN, June 1st, 1860.